

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A catalyst ~~that comprises comprising~~ at least one hydro-dehydrogenating element and a substrate ~~that comprises comprising~~ at least one silica-alumina, ~~whereby~~ said silica-alumina ~~has~~ having the following characteristics:

- ~~a silica content by weight of silica~~ of 10-60% by weight,
- ~~a sodium content that is less than 300 ppm by weight,~~
- ~~a total pore volume of between 0.5 and 1.2 ml/g,~~
- ~~the a volume of mesopores with a diameter of between 40-150 Å, and a mean diameter of between 80-120 Å represents representing~~ 30-80% of the total pore volume,
- ~~the a volume of macropores with a diameter that is greater than 500 Å represents representing~~ 20-80% of the total pore volume, and
- ~~a specific surface area that is greater than 200 m²/g.~~

Claim 2 (currently amended): A catalyst according to claim 1, in which the silica-alumina comprises Al_{VI} (octahedral) species and Al_{IV} (tetrahedral) species, ~~whereby~~ wherein the proportion of the tetrahedral Al_{IV} is between 20 and 40%.

Claim 3 (currently amended): A catalyst according to claim 1, ~~in which~~ wherein the silica-alumina comprises 30-50% of Q^2 species, wherein an Si atom is linked to two Si or Al atoms and

to two OH groups and also comprises 10-30% of Q³ species wherein an Si atom is linked to three Si or Al atoms and to an OH group.

Claim 4 (currently amended): A catalyst according to claim 1, ~~that contains~~ further containing at least one of boron and silicon.

Claim 5 (currently amended): A catalyst according to claim 1, ~~that contains~~ further containing at least one element that is selected from among groups VIIA, VIIB, and VB.

Claim 6 (currently amended): A catalyst according to claim 1, ~~in which~~ wherein the substrate consists of said silica-alumina.

Claim 7 (currently amended): A catalyst according to claim 1, ~~whose~~ wherein the substrate further comprises 1-40% by weight of binder.

Claim 8 (currently amended): A catalyst according to claim 7, ~~in which~~ wherein the substrate results from the comprises a mixture of said silica-alumina and at least one binder selected from the group consisting of silica, alumina, clays, titanium oxide, boron oxide and zirconium.

Claim 9 (currently amended): A catalyst according to claim 1, ~~that has~~ having undergone a sulfurization treatment.

Claim 10 (currently amended): A process ~~for~~ comprising hydrocracking with a catalyst according to claim 1, at a temperature that is greater than 200°C, a pressure that is greater than

0.1 Mpa, with an amount of hydrogen of at least 50 l/l of feedstock, and with an hourly volumetric flow rate of 0.1 to 20 volumes of feedstock per volume of catalyst and per hour.

Claim 11 (currently amended): A process according to claim 10 for the hydrocracking of feedstocks that are selected from the group that is formed by consisting of kerosenes, gas oils, vacuum gas oils, atmospheric residues, vacuum residues, atmospheric distillates, vacuum distillates, heavy fuels, oils, waxes, paraffins, waste oils, deasphalts residues, deasphalts crudes, the feedstocks that are obtained from thermal conversion or catalytic conversion processes, whereby the said feedstocks contain containing less than 30% by weight of paraffins.

Claim 12 (previously presented): A process according to claim 10, wherein the feedstock is first hydrotreated.

Claim 13 (currently amended): A process according to claim 10, in which wherein the hydrocracking is carried out in two stages with intermediate separation, whereby the said catalyst is used being incorporated in at least one stage.

Claim 14 (currently amended): A process according to claim 10, in which wherein the feedstock contains less than 25% by weight of paraffin.

Claim 15 (previously presented): A catalyst according to claim 1, wherein the volume of macropores in said silica-alumina is 20-70% of the total pore volume.

Claim 16 (currently amended): A catalyst according to claim 4 that contains further containing at least one element that is selected from among groups VIIA, VIIB, and VB.

Claim 17 (currently amended): A catalyst according to claim 5, ~~in which~~ wherein the substrate consists of said silica-alumina.

Claim 18 (previously presented): A catalyst according to claim 5, ~~whose~~ said substrate ~~comprises~~ comprising 1-40% by weight of binder.

Claim 19 (currently amended): A catalyst according to claim 18, ~~that has~~ having undergone a sulfurization treatment.

Claim 20 (previously presented): A catalyst according to claim 19, wherein the volume of macropores in said silica-alumina is 20-70% of the total pore volume.

Claim 21 (new): A catalyst according to claim 1, wherein the substrate consists essentially of said silica-alumina.

Claim 22 (new): A catalyst according to claim 9, wherein the substrate consists essentially of said silica-alumina.

Claim 23 (new): A process comprising hydrocracking with a catalyst according to claim 21, at a temperature that is greater than 200°C, a pressure that is greater than 0.1 Mpa, with an amount of hydrogen of at least 50 l/l of feedstock, and with an hourly volumetric flow rate of 0.1 to 20 volumes of feedstock per volume of catalyst and per hour.

Claim 24 (new): A process comprising hydrocracking with a catalyst according to claim 22, at a temperature that is greater than 200°C, a pressure that is greater than 0.1 Mpa, with an amount of hydrogen of at least 50 l/l of feedstock, and with an hourly volumetric flow rate of 0.1 to 20 volumes of feedstock per volume of catalyst and per hour.